

REMARKS

Claims 3, 4, 13 and 14 are pending in this application. By this Amendment, claim 14 is amended. The amendment introduces no new matter because it is made to overcome an informality noted in the Office Action. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The Office Action, in paragraph 3, rejects claims 14 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. This rejection is respectfully traversed. Claim 14 is amended to obviate the rejection in consideration of the observations made in the Office Action. Accordingly, reconsideration and withdrawal of the rejection of claim 14 under 35 U.S.C. §112, first paragraph, are respectfully requested.

The Office Action, in paragraph 4, rejects claims 3, 4, 13 and 14 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over, U.S. Patent No. 4,279,683 to Landsness or DE 191831 747 A1 to Continental alone, or either of these references taken further in view of U.S. Patent No. 5,380,384 to Tokunaga et al. (hereinafter "Tokunaga"). These rejections are respectfully traversed.

Landsness teaches a machine for winding a flat ribbon onto a tire carcass (col. 4, lines 4 and 5) and an apparatus for applying a flexible rubber-like strip onto a green tire (col. 4, lines 39-240).

Continental teaches a process to make tires in two stages with intermediate vulcanization. Tire carcass and partial belt back are applied and vulcanized to a predetermined cross section with reinforcements, in a mold (Abstract).

The Office Action continues to maintain that the combinations of features positively recited in the pending claims are taught, or reasonably would have been suggested, by one or the other of these references alone or in combination with Tokunaga.

Independent claim 13 clarifies that a widthwise center portion of a substantially cylindrical carcass band is radially outwardly expanded and an unvulcanized rubber strip is successively wound and joined onto and at a peripheral surface of the expanded carcass band to form at least one tire constitutive member. Claim 13 specifically clarifies that the successively winding and joining step is carried out after the radially outwardly expanding step. In this regard, even if the tire constitutive member has a complicated shape, this process makes possible the production of the tire constitutive member simply, easily and precisely without being restricted by requirements imposed by conventional tire building processes and/or equipment. Applicants specification, at least at paragraph [0010], discusses these unanticipated advantages of the subject matter of the pending claims.

For their part, each of Landsness and Continental disclose that a rubber strip is wound and laminated on a support having a shape similar to a product tire. However, these references fail to teach, or reasonably to have suggested, winding of the rubber strip after the radial expansion of the carcass band to provide, for example, the significant advantageous effects that as are enumerated as among the unanticipated benefits achieved by the subject matter of the pending claims.

Prior art processes, as are discussed in Applicants' disclosure, for example, at paragraph [0003], often result in imprecision with regard to winding position, or irregularities developing at the joints between different constitutive members wound around a tire shaping drum. These disadvantages arise due to differences in circumferential length between inner and outer members when the substantially cylindrical carcass band is expanded radially. Neither of Landsness nor Continental recognizes such a problem since the disclosed carcass bands are not expanded radially before winding of the rubber strip. Simply because Tokunaga discloses a radial expansion of a substantially cylindrical carcass band does not overcome the above-identified shortfalls in the specification of the other references to the

subject matter of the pending claims. In fact, Tokunaga does not recognize these difficulties because it fails to teach, or reasonably to have suggested, a winding of a rubber strip after the radial expansion of the carcass band to provide the advantageous effects produced by the subject matter of the pending claims.

In other words, the objectives addressed by the subject matter of the pending claims are not recognized in any of the applied references, and no objective evidence of record has been provided to indicate that this problem is otherwise recognized in the prior art.

Clearly, neither of Landsness nor Continental teach the combination of features now recited in independent claim 13, as discussed above. Further, one of ordinary skill in the art would not have been motivated to combine Landsness or Continental with Tokunaga in the manner suggested. Such a combination of references can only be derived through the improper application of hindsight reasoning based on the road map provided by Applicants' disclosure.

In response to Applicants' previously having made arguments such as those set forth above regarding the non-obvious nature of the subject matter of the pending claims, the Office Action, in paragraph 6, indicates that both Landsness and Continental are "considered to clearly be winding on a toroidally shaped carcass." The rebuttal asserts that the features upon which the Applicants rely for traversing the prior art rejections of the Office Action are "implicit or obvious" for reasons noted in the specific statement of the rejection. The essence of the argument of the Office Action in this regard is set forth, for example, on page 4 where the Office Action states "the carcass has apparently been toroidally shaped from cylindrical form as typical ... even if it were not considered to be an explicit disclosure that the carcass is shaped from cylindrical form, such would have certainly been the natural and obvious technique to form the toroidal carcass in light of the reference to typical two-stage building. In this regard, the Office Action makes assertions that are well too broad regarding what is

implicit or obvious in light of the disclosures of the applied references. It is neither explicit nor obvious, that the rubber strip be wound as recited after radially outwardly expanding a width-wise center portion of a substantially cylindrical carcass band. The on-going broad assertions of this Office Action, much has been the case of previous Office Actions, do not meet the applicable standards for rendering obvious the subject matter of the pending claims over what either Landsness or Continental can reasonably be considered to have suggested with respect to the subject matter of the pending claims.

The subject matter of the pending claims specifically addresses a particular problem noted in the prior art, which previous solutions have been ineffective in addressing. When a substantially cylindrical carcass band is expanded radially, precision with regard to the winding position of any unvulcanized rubber strip wound thereon tends to degrade. Additionally or alternatively, irregularities tend to develop at the joints between the different constituted members wound around the tire shaping drum due differences in circumferential length between inner and outer members.

The subject matter of independent claim 13 provides a method for producing a green tire which is highly precise in shape and arrangement of the tire constituted members. The steps recited in the pending claims are not specifically shown, or necessarily implicit, in the particular disclosures of each of the references. These steps are necessarily taken in order to prevent separation or deformation of the rubber strip, which may otherwise degrade the precision with which the eventual product tire is fabricated.

Continental discloses a method wherein a rubber strip is applied to a skeleton structure including a carcass member which has already been made into a shape similar to that of a product tire and at least partially vulcanized. Continental discloses a dual vulcanization fabrication process. Such a process is disadvantageous in that, not only does productivity significantly decrease, but also the side portions of product tire having the

smallest rubber gauge tend to undergo excessive vulcanization, and/or separation tends to occur at an interface between the semi-vulcanized rubber strip and the unvulcanized rubber strip, thereby degrading the quality of the product tire. For at least this reason, Continental, and in like manner Landsness, cannot reasonably be considered to have suggested the combination of all of the features positively recited in independent claim 13.

For at least the above reasons, Landsness or Continental, even when taken in combination with Tokunaga, cannot reasonably be considered to teach, or to have suggested, the combination of all of the features positively recited in independent claim 13. Claims 3, 4 and 14 are not suggested by any combination of the applied references for at least the respective dependence of these claims on independent claim 13, as well as for the separately patentable subject matter that each of these claims recites.

The Office Action, in paragraph 5, rejects claims 3, 4, 13 and 14 under 35 U.S.C. §102(b) as anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over JP-A-10-109506 to Otsu. This rejection is likewise traversed.

For the same reasons as were set forth above regarding the other applied references, this reference is applied in a manner that again overly broadly construes the teachings of the reference for what it can reasonably be considered to have suggested with respect to the subject matter of the pending claims. The Office Action asserts that certain of the features are taught, or at least suggested, by Otsu with qualifiers such as "it would seem reasonable" to read the reference to teach one of the features, or that the reference indicates that the layers "may also be wound." The Office Action further asserts, without objective evidence of record, what certain terms disclosed in Otsu "would have been understood [] as suggesting or certainly rendering obvious." The Office Action, by stringing together this series of suppositions regarding what the feature of the Office Action would seem to reasonably teach

or maybe disclose, perhaps suggest, or certainly render obvious to one of ordinary skill, then concludes that the combinations of all of the specifically recited claim features are taught.

The Office Action stretches the reasonability of these conclusions at the top of page 8. Here, the Office Action asserts, specifically with respect to the features positively recited in claim 14, that although the reference teaches "preferably wounded succession from inside to outside in the radial direction," one of ordinary skill in the art would recognize that it "could proceed in the opposite direction if desired, only the expected results being achieved." Even if this assumption were true, it does not serve to render anticipated or obvious at least the features positively recited in dependent claim 14.

For at least the above reasons, Otsu cannot reasonably be considered to teach, or to have suggested the combination of all of the features positively recited in independent claim 13. Further, claims 3 and 14 are also not, nor would they have been suggested by, Otsu for at least the respective dependence of these claims on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recite.

Accordingly, reconsideration and withdrawal of the rejection of claims 3, 4, 13 and 14 under 35 U.S.C. §102(b) as being anticipated by, or, in the alternative, under 35 U.S.C. §103(a) as being obvious over, Otsu, are respectfully requested.

Generally, the Office Action fails to show how the features positively recited in the pending claims are explicitly, or impliedly, taught by any one of the applied references. Additionally, any standard by which to render obvious the subject matter of the pending claims seems to be overly broadly applied in the obviousness analysis provided. The proper standard to determine obviousness requires (1) that the Examiner step backward in time into the shoes of the hypothetical "person of ordinary skill in the art," (2) that "[i]n view of all the factual information, the Examiner must then make a determination whether the claimed invention 'as a whole' would have been obvious at the time to that person," and (3) that any

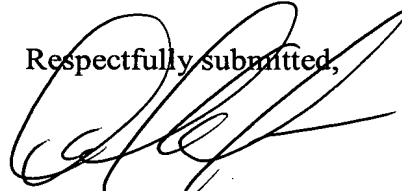
knowledge gained from Applicants' disclosure be put aside at reaching this determination in order to avoid the tendency to resort to the permissible application of hindsight reasoning. Clearly, the obviousness rejections set forth in this Office Action fail to apply this standard in showing how, in any obviousness way, one of ordinary skill in the art would have predictably modified the references in the manner suggested by the Office Action. Further, Federal Court precedents tells us that the required showing must be made by some objective evidence of record. Even post-*KSR*, the analysis supporting obviousness rejection must be explicit. The Supreme court in *KSR* proved the conclusions set forth in the Federal Circuit in *In re Kahn* (citations omitted) that "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some articulated underpinning to support the legal conclusions of obviousness." This standard is not met here with the mere conclusory statements regarding what each of the references may reasonably be considered to teach with respect to modifying the apparatus and methods disclosed therein in order to render obvious the subject matter of the pending claims. In other words, even to the extent that there is articulated reasoning in the Office Action, there is no rational underpinning to that reasoning other than conjecture, supposition and presumption that is not adequately shown by any objective evidence of record. In the aftermath of *KSR*, exemplary rationales to guide the obviousness analysis in supporting a rejection under 35 U.S.C. §103, in light of *KSR* were provided. The mandate of the guidance provided with these rationales is that "[t]he key to supporting any rejection under 35 U.S.C. §103 is the clear articulation of the reason(s) why the claimed inventions would not have been obvious." The pending obviousness rejections do not comply with this standard, nor is any attempt made by the Office Action to frame the asserted obviousness rejections over this combination of applied references under any of the exemplary rationales set forth in the Patent Office's guidance.

Accordingly, reconsideration and withdrawal of the rejections of claims 3, 4, 13 and 14 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over, the applied references are respectfully requested.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 3, 4, 13 and 14 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Petition for Extension of Time

JAO:DAT/hms

Date: August 6, 2008

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